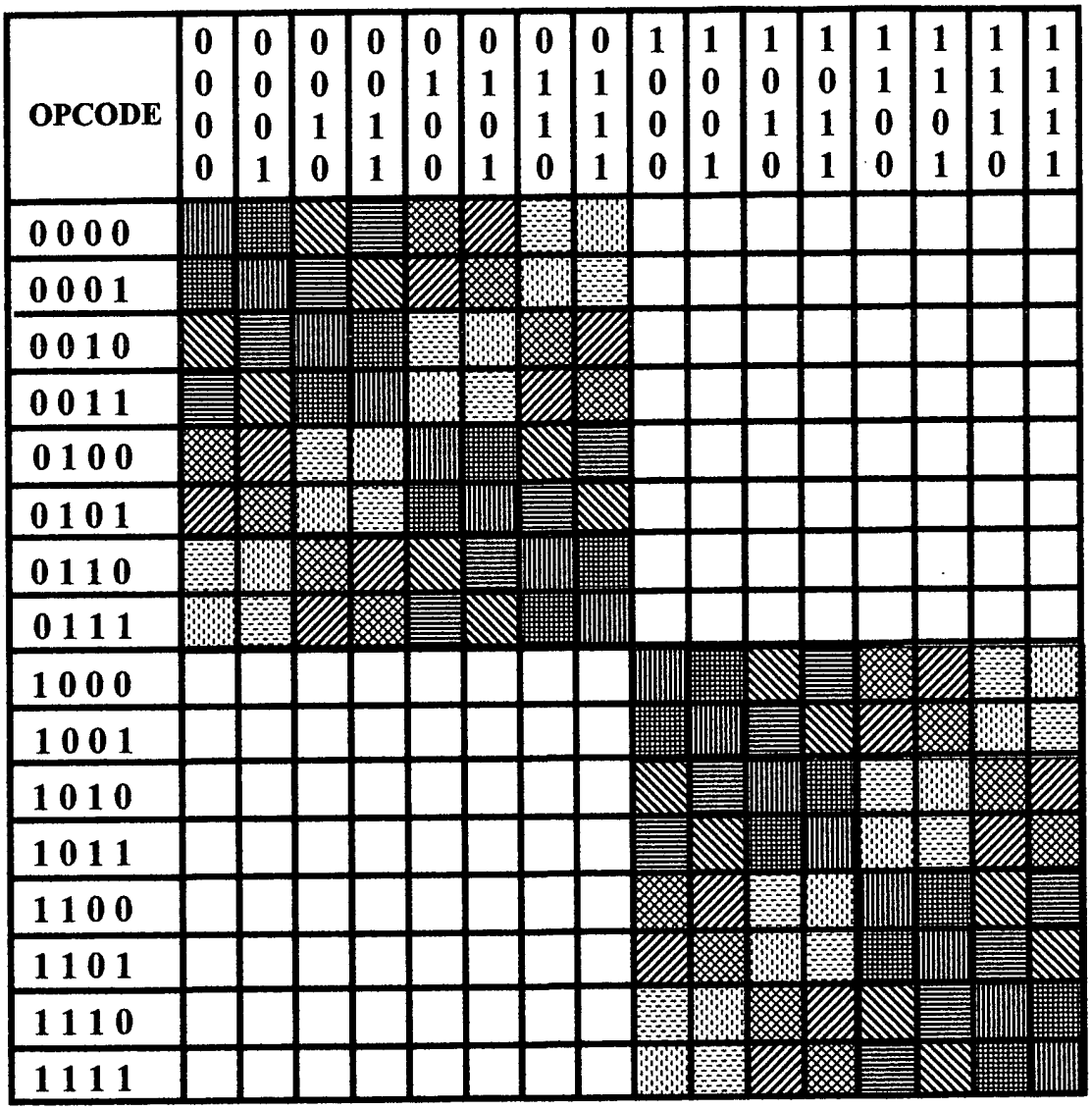
OPCODE	0 0 0 0	0 0 0 1	0 0 1 0	0 0 1 1	1 1 0 0	1 1 0 1	1 1 1 0	1 1 1 1
0 0 0								
0 0 1								
0 1 0								
0 1 1								
1 0 0								
1 0 1								
1 1 0								
1 1 1								

COLOR CODE	1 0 0	1 0 1	1 1 0	1 1 1	0 - -
COLOR					

COLOR ASSIGNMENT FOR N = 4

FIG. 23 - AMENDED



COLOR CODE	1000	1001	1010	1011	1100	1101	1110	1111	0---
COLOR									

COLOR ASSIGNMENT FOR N = 8

FIG. 24 - AMENDED

LEGEND

N : DIMENSION OF LOGIC GAME = NUMBER OF PREDETERMINED COLORS WHICH MAY BE DISPLAYED, (EXCLUDED REFLECTED COLOR WHEN DISPLAY IS DARK)
= 4 (FOR THE PREFERRED EMBODIMENT)

n : NUMBER OF BINARY BITS IN OPCODE AND COLOR CODE
= ln N + 1 = 3 (FOR THE PREFERRED EMBODIMENT)

I : ROW NUMBER I, I = 1, ..., N

J : COLUMN NUMBER J, J = 1, ..., N

DIR : ROUTE DIRECTION BETWEEN TWO ADJACENT ROUTING SQUARES;
"R" DENOTES RIGHT
"U" DENOTES UP
"L" DENOTES LEFT
"D" DENOTES DOWN

T : OPCODE TRANSMITTER; T = 1, ..., 2N

R : OPCODE RECEIVER; R = 1, ..., 2N

RC(T) : RECEIVER CONNECTED TO TRANSMITTER "T"

TC(R) : TRANSMITTER CONNECTED TO RECEIVER "R"

W(I,J) : STATUS OF SWITCH LOCATED AT ROW "I" AND COLUMN "J," OR STATUS OF ROUTING SQUARE AT ROW "I" AND COLUMN "J"

TCODE(T) : OPCODE AT TRANSMITTER "T"

RCODE(R) : OPCODE AT RECEIVER "R"

C(R) : COLOR CODE AT RECEIVER "R"

x(i) : THE ith BIT OF OPCODE "X"

y(i) : THE ith BIT OF OPCODE "Y"

cb(i) : THE ith BIT OF COLOR CODE "C"

C1(I,J) : COLOR CODE AT THE RIGHT EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

C2(I,J) : COLOR CODE AT THE TOP EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

C(I,J) : COLOR CODE SELECTED FOR DISPLAY AT THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

$\oplus$: EXCLUSIVE OR BOOLEAN FUNCTION

$\odot$: [INCLUSIVE OR BOOLEAN FUNCTION] EXCLUSIVE NOR BOOLEAN FUNCTION

EXPLANATION OF PROGRAM VARIABLES OF FIGS. 19 – 22

FIG. 18
ANNOTATED MARKED UP DRAWING

LEGEND

N : DIMENSION OF LOGIC GAME = NUMBER OF PREDETERMINED COLORS WHICH MAY BE DISPLAYED, (EXCLUDED REFLECTED COLOR WHEN DISPLAY IS DARK)
= 4 (FOR THE PREFERRED EMBODIMENT)

n : NUMBER OF BINARY BITS IN OPCODE AND COLOR CODE
= ln N + 1 = 3 (FOR THE PREFERRED EMBODIMENT)

I : ROW NUMBER I, I = 1, ..., N

J : COLUMN NUMBER J, J = 1, ..., N

DIR : ROUTE DIRECTION BETWEEN TWO ADJACENT ROUTING SQUARES;
"R" DENOTES RIGHT
"U" DENOTES UP
"L" DENOTES LEFT
"D" DENOTES DOWN

T : OPCODE TRANSMITTER; T = 1, ..., 2N

R : OPCODE RECEIVER; R = 1, ..., 2N

RC(T) : RECEIVER CONNECTED TO TRANSMITTER "T"

TC(R) : TRANSMITTER CONNECTED TO RECEIVER "R"

W(I,J) : STATUS OF SWITCH LOCATED AT ROW "I" AND COLUMN "J," OR STATUS OF ROUTING SQUARE AT ROW "I" AND COLUMN "J"

TCODE(T) : OPCODE AT TRANSMITTER "T"

RCODE(R) : OPCODE AT RECEIVER "R"

C(R) : COLOR CODE AT RECEIVER "R"

x(i) : THE ith BIT OF OPCODE "X"

y(i) : THE ith BIT OF OPCODE "Y"

cb(i) : THE ith BIT OF COLOR CODE "C"

C1(I,J) : COLOR CODE AT THE RIGHT EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

C2(I,J) : COLOR CODE AT THE TOP EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

C(I,J) : COLOR CODE SELECTED FOR DISPLAY AT THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"

$\oplus$: EXCLUSIVE OR BOOLEAN FUNCTION

$\odot$: EXCLUSIVE NOR BOOLEAN FUNCTION

EXPLANATION OF PROGRAM VARIABLES OF FIGS. 19 – 22

FIG. 18 - AMENDED